

WHAT IS CLAIMED IS:

1. A method for determining the concentration of an analyte in a sample, said method comprising:
  - a. providing a system comprising:
    - i) a reagent test strip having a sample receiving region, and
    - ii) a meter for determining analyte concentration in a sample introduced to said sample receiving region,
  - b. introducing a sample to said receiving region, wherein said sample is selected from the group consisting of a control fluid and a test fluid, with the proviso that said control fluid is free of a mediator dissolution slowing component and an oxidizing agent when said analyte concentration is determined using electrochemical methods, and
  - c. determining the concentration of analyte in said sample with said meter, wherein said method further comprises determining whether said sample is a control fluid or a test fluid to obtain sample identification information .
2. The method according to claim 1, wherein said sample is determined to be a control fluid or a test fluid in less than about 20 seconds from the time of sample introduction.
- 3 The method according to claim 1, further comprising the step of storing said sample identification information in a memory element of said meter.
4. The method according to claim 1, further comprising the step of excluding said sample identification information from a memory element of said meter.
5. The method according to claim 1, wherein said analyte is glucose.
6. The method according to claim 1, wherein said test sample is whole blood.

7. The method according to claim 1, wherein said meter measures a signal produced by said control fluid and said test fluids, and said measured signal produced by said control fluid is less than said measured signal produced by said test fluid.

8. The method according to claim 1, wherein said meter is an electrochemical meter.

9. The method according to claim 8, wherein said sample is determined to be a control fluid or a test fluid in less than about 1 second from the time of sample introduction.

10. The method according to claim 1, wherein said meter is an optical meter.

11. The method according to claim 10, wherein said sample is determined to be a control fluid or a test fluid in about 10-20 seconds from the time of sample introduction.

12. The method according to claim 10, wherein said step of introducing sample comprises introducing a control fluid comprising a reflectance component.

13. the method according to claim 12, wherein said reflectance component comprises a dye having a maximum absorbance of visual light outside that of hemoglobin.

14. The method according to claim 13, wherein said reflectance component is selected from the group consisting of copper phthalocyanine-3,4',4'',4''' – tetrasulfonic acid, tetrasodium salt, 3,7-bis(dimethylamino)phenothiazin-5-ium chloride, copper(II) phthalocyanine and 1-(1-naphthylazo)-2-naphthol-3,6-disulfonic acid disodium salt.

15. A meter for determining the concentration of an analyte in a sample, wherein said meter comprises a sample identification element for identifying whether a sample is a test fluid or a control fluid, wherein said sample identification element comprises at least one reference value selected from the group consisting of a reflectance value and a current value and said current value is one that is observed in less than about 1 second from the time said sample is introduced to said meter.

16. The meter according to claim 15, wherein said meter further comprises a memory element capable of storing a plurality of analyte concentrations.

17. The meter according to claim 16, wherein said memory element is capable of storing said plurality of analyte concentrations of said control fluid and said test fluid distinguishably.

18. The meter according to claim 16, wherein said meter is capable of averaging said plurality of stored analyte concentrations stored in said memory element.

19. The meter according to claim 16, wherein said meter is capable of excluding said analyte concentration of said control fluid from said memory element while storing said analyte concentration of said test fluid in said memory element.

20. The meter according to claim 15, wherein said meter further comprises a test strip.

21. The meter according to claim 15, wherein said meter is an optical meter.

22. The meter according to claim 21, wherein said reflectance value is one that is observed in about 10-20 seconds from the time sample is introduced to said meter.

23. The meter according to claim 15, wherein said meter is an electrochemical meter.

24. A system for determining the concentration of an analyte in a sample, said system comprising:

- (a) a reagent test strip having a sample receiving region, and
- (b) a meter according to claim 15.

25. A kit for determining the concentration of an analyte in a sample, said kit comprising:

- (a) a meter according to claim 15, and
- (b) a substrate comprising instruction for using said meter to determine the concentration of an analyte in a sample.

FOR REVIEW